Clean Version of Pending Claims 1-25

- A dental implant system comprising
 an expandable polymer sheath suitable
 for placement within a jawbone; and
 a rigid implant fitting within the polymer sheath and causing expansion of the polymer
 sheath when fitted within the sheath.
 - A system as in claim 1
 wherein the polymer is Ultra High Molecular Weight Polyethylene.
 - A system as in claim 1 wherein the polymer is Polypropylene.
 - 4. A system as in claim 1 wherein the polymer is High Density Polyethylene.
 - A system as in claim 1
 wherein the polymer is Polyurethane Elastomer.
 - 6. A system as in claim 1 wherein in the implant is made of titanium or an alloy thereof.
 - 7. A system as in claim 1 wherein the implant is made of stainless steel or an alloy thereof.
 - A system as in claim 1
 wherein the polymer sheath has an exterior surface that is ribbed.
- 9. A system as in claim 1 wherein the polymer sheath has an interior surface that is threaded, and wherein the implant has an exterior surface that is threaded, and whereby the interior surface of the polymer sheath mates with the exterior surface of the implant when the implant is fitted within the polymer sheath.



Serial No. 10/034,344 Preliminary Amendment

- 10. A system as in claim 1 wherein the implant is tapered.
- 11. A system as in claim 1 wherein the implant is ribbed.
- 12. A system as in claim 1

further comprising an abutment adapted to be fixed to the rigid implant, the abutment permitting attachment of a dental prosthesis.

13. A system as in claim 12

wherein the polymer sheath, the implant, and the abutment, when coupled together and inserted within a jawbone, form a support structure that permits attachment of a dental prosthesis.

- 14. A system as in claim 13wherein the prosthesis is a single crown.
- A system as in claim 13
 wherein the prosthesis is a bridge.
- 16. A system as in claim 13 wherein multiple support structures support a dental prosthesis.
- 17. A system as in claim 16 wherein the prosthesis is a bridge.

A system as in claim 1

wherein expansion of the sheath upon insertion of the implant results in immediate stability of the sheath within the jaw bone.

A system as in claim 13
wherein the support structure and prosthesis can be inserted in a single office visit.

Serial No. 10/034,344 Preliminary Amendment

20 (Amended). A method of installing a dental prosthesis comprising the steps of: providing a system as in claim 1; preparing a site within a jawbone; inserting the polymer sheath into the prepared site;

inserting the implant within the sheath, thereby causing expansion of the sheath within the jawbone;

coupling the abutment to the implant; whereby the sheath, the implant, and the abutment form a support structure for a dental prosthesis; and attaching a dental prosthesis to the abutment.

- 21. A method as in claim 20 wherein the prosthesis is a crown.
- 22. A method as in claim 20 wherein the prosthesis is a bridge.
- 23. A method as in claim 20 comprising the further step of: implanting a plurality of support structures into the jawbone.
- 24. A method as in claim 23 further comprising the step of attaching a bridge to the support structures.
- 25. A method of inserting a dental implant comprising the steps of providing a system as in claim 1; preparing a site within a jawbone; and inserting the polymer sheath into the prepared site; and inserting the implant within the sheath, thereby causing expansion of the sheath within the jawbone.

A